

CLAIMS

WHAT IS CLAIMED IS:

- 1 1. A video recording and playback system comprising:
 - 2 (a) a video recorder/player having a record mode, a play mode and a fast
 - 3 scan mode;
 - 4 (b) a recording medium for insertion into the video recorder/player so as to
 - 5 record a video signal thereon in the record mode and play the video signal recorded
 - 6 thereon in the play mode, said video signal including program material of first and
 - 7 second categories;
 - 8 (c) event detection means for detecting events within the video signal;
 - 9 (d) means for marking the recording medium with a first type of mark in
 - 10 proximity to a respective event recorded on the recording medium;
 - 11 (e) a data memory for storing times of occurrence of the events detected in
 - 12 the record mode;
 - 13 (f) means for analyzing the events to classify segments of the video signal
 - 14 as containing program material of one of the first category and second category;
 - 15 (g) means for positioning the recording medium to beginning and ending
 - 16 positions of each segment of the video signal classified as containing program
 - 17 material of the second category;
 - 18 (h) means for marking the recording medium with a second type of mark in
 - 19 predetermined relationship to a corresponding first type of mark at each of said
 - 20 beginning positions and with a third type of mark in predetermined relationship to a
 - 21 corresponding first type of mark at each of said ending positions.

1 2. The system of claim 1 further comprising:
2 mark detection means for detecting the second and third types of marks;
3 control means for causing the video recorder/player to enter the fast scan
4 mode when the second type of mark is detected and for causing the video recorder/
5 player to enter the play mode when the third type of mark is detected.

1 3. The system of claim 1 wherein the means for marking the recording
2 medium with a first type of mark comprises a recording head for a video sync control
3 signal.

1 4. The system of claim 1 wherein the means for marking the recording
2 medium with a second and third type of mark comprises a recording head for a video
3 sync control signal.

1 5. The system of claim 1 wherein the recording medium is a video tape.

1 6. The system of claim 1 wherein the recording medium is a magnetic disk.

1 7. The system of claim 1 wherein the recording medium is an optical disk.

1 8. A video-recording method comprising the steps of:
2 (a) recording a video signal on a recording medium;
3 (b) monitoring the video signal as it is recorded to detect events therein;
4 (c) marking the recording medium with a first type of mark in proximity to a
5 respective event recorded on the recording medium;
6 (d) storing data representative of a time of occurrence of each event;

7 (e) analyzing the data to classify segments of the video signal between
8 events as one of a first and second category;
9 (f) positioning the recording medium to beginning and ending positions of
10 each segment of the video signal classified as the second category;
11 (g) marking the recording medium with a second type of mark in
12 predetermined relationship to a corresponding first type of mark at each of said
13 beginning positions;
14 (h) marking the recording medium with a third type of mark in predetermined
15 relationship to a corresponding first type of mark at each of said ending positions.

1 9. The method of claim 8 wherein the recording medium is a video tape.

1 10. The method of claim 8 wherein the recording medium is a magnetic disk.

1 11. The method of claim 8 wherein the recording medium is an optical disk.

1 12. The method of claim 8 wherein the first type of mark is recorded on a
2 video sync control track.

1 13. The method of claim 8 wherein the second and third types of mark are
2 recorded on a video sync control track.

1 14. The method of claim 8 further comprising the steps of:
2 replaying the recorded video signal;
3 playing the segments of the video signal classified as the first category at
4 normal speed; and

5 rapidly scanning through the segments of the video signal classified as
6 the second category.

1 15. A method of processing a video signal recorded on a recording medium
2 comprising the steps of:

3 (a) replaying the recorded video signal to detect events therein;
4 (b) marking the recording medium with a first type of mark in proximity to a
5 respective event recorded on the recording medium;
6 (c) storing data representative of a time of occurrence of each event;
7 (d) analyzing the data to classify segments of the video signal between
8 events as one of a first and second category;

9 (e) positioning the recording medium to beginning and ending positions of
10 each segment of the video signal classified as the second category;

11 (f) marking the recording medium with a second type of mark in
12 predetermined relationship to a corresponding first type of mark at each of said
13 beginning positions;

14 (g) marking the recording medium with a third type of mark in predetermined
15 relationship to a corresponding first type of mark at each of said ending positions.

1 16. A method of cueing a pre-recorded video tape to a desired segment
2 comprising the steps of:

3 (a) rewinding the tape to the beginning of the tape;
4 (b) advancing the tape;
5 (c) monitoring the video signal recorded on the tape as it is advanced to
6 detect events therein;
7 (d) storing data representative of a time of occurrence of each event;

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8 (e) analyzing the data to classify one such event as marking the beginning of
9 the desired segment; and;
10 (f) rewinding the tape to said event classified as marking the beginning of
11 the desired segment.

1 17. The method of claim 16 wherein the step of analyzing comprises
2 determining if a predetermined period of time has elapsed since a last detected event.

1 18. The method of claim 16 wherein the tape is advanced at a speed higher
2 than a normal play speed.

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